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ABSTRACT

Frequently speakers confront hostile groups and audiences with opposite points of view. Public communicators faced with this dilemma can choose not to address the group or, in speaking, can avoid points of contention, but a third more subtle alternative used is deliberate ambiguity or vagueness, a rhetorical strategy known as equivocation. But do listeners perceive equivocation, and what effect does equivocation have, especially negatively worded sentences, on source credibility? More than 60 undergraduates at the University of Oklahoma were subjects in a test of this question. Results show that (1) listeners' prior attitudes determine if the message is interpreted as being vague; (2) no significant differences were found between (a) agreement with a message and the order of the equivocated and clearly stated issues as well as (b) all issues being stated positively or all issues being stated negatively; (3) source credibility is not significantly affected by order of presenting equivocated issues; and (4) there is greater recall if all the issues are presented positively. (DS)

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THE EFFECTS OF EQUIVOCATION AND NEGATIONS ON MESSAGE PERCEPTION AND SOURCE CREDIBILITY

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THE EFFECTS OF EQUIVOCATION AND NEGATIONS ON MESSAGE PERCEPTION AND SOURCE CREDIBILITY

In an effort to better prepare their students for persuasive discourse, teachers of speech since antiquity have emphasized the importance of knowing the attitudes and beliefs of the audience. In addition, this instruction has stressed the necessity of devising an appropriate strategy which identifies with those dispositions and meets the expectations of the listeners. Depending on the context of the communication event and the nature of the audience, the speaker is faced with the problem of choosing a strategy which will maximize the probability of success. If the speaker and audience hold similar attitudes, then the speaker may feel inclined to honestly and openly disclose the specifics of his position. However, what strategy should the speaker employ if he knows the audience strongly disagrees with his position on certain issues? Surely the best rhetorical advice would not be for him to be "crystal clear" on each issue, completely unfolding the intricacies of his position. Such an approach would probably alienate many in the audience and contribute to a loss in credibility.

What then is an alternative approach? Of course the simplest resolution to the problem would be to avoid confrontation and misunderstanding altogether by not addressing the audience. Another tactic might be to give the speech but completely ignore all issues which hold the potential for disagreement. However, these approaches appear unrealistic. In the political arena where this strategy dilemma typically

occurs, public officials are expected to make public appearances and deal with the important issues confronting their constituents.

As a third alternative to dealing with a communication situation where audience and speaker beliefs differ greatly, this paper investigates the use of deliberate vagueness, that is equivocation, as a rhetorical strategy. More specifically, the paper seeks to determine if and how listeners perceive equivocation as well as determine what effects equivocation has on source credibility. As a secondary concern, the paper investigates the use of negatively worded statements to see how they effect message perception and source credibility.

Defining Ambiguity, Vagueness, and Equivocation

There appears to be considerable confusion regarding the defining characteristics of "ambiguity," "vagueness," and "equivocation." Quite frequently the research literature uses these terms interchangeably, which tends to add misunderstanding to confusion.

In an effort to conceptually distinguish these terms, Goss (1971) reviewed the literature on verbal ambiguity and offers some meaningful distinctions. According to Goss, an ambiguous term is one which has two or more rather distinct and clear areas of reference, however the choice between the alternative referents is in question. For example, the word "star" may refer to a glowing object in the sky, a geometric figure with five points, or the principal member in a theatrical

production. The fields of reference are distinct, but it is not clear which meaning should be chosen. The listener must depend on the context of the word, both in the sentence and the situation, in making this choice.

A vague word is one which has one field of reference but the extent of its boundaries is in question. When the outer parameters of the meaning of a word are fuzzy and flexible, there is room for a broad or narrow range of interpretation depending on the individual perceiving the message. For example, how old is "middle-aged"? Perhaps we would agree that a person 50 years old is middle-aged, but what about a person 40, or one 60 years old? We could probably agree that ages 20 and 80 are not middle-aged, but we would have difficulty agreeing on the boundary ages for the term "middle-aged". With vagueness the issue is one of precision, whereas with ambiguity the issue is one of accuracy, and while there is some vagueness in all words, not all terms are ambiguous (that is, have different and distinct fields of reference).

The final term to be defined is "equivocation". Very simply, equivocation is being deliberately vague. By choosing words which have flexible boundaries and a wide range of interpretation, a speaker allows listeners to react in a way which suits them best and supply whatever referents they feel belong in the range covered by the equivocated phrase. "The goal of equivocation . . . , is to avoid offending people, to minimize alienating, and if possible to win a few people to the speaker's side (Goss, 1971, p. 16).

Research Investigating Equivocation

One of the first pieces of experimental research investigating the effect of equivocated messages was done by Samovar (1962). Using the texts from the 1960 Nixon-Kennedy debates, Samovar selected six clear passages and six equivocated passages. After subjects heard all twelve passages they were asked to verbalize what they thought the speaker was saying. Results showed that the equivocated passages had an average of 15.5 different interpretations whereas the clear passages produced an average of 6.6 different interpretations. While this research does not investigate the nature of equivocation in detail, the findings suggest that vague messages do evoke significantly more meanings than do clear messages.

Several studies have produced evidence to support the assumption that ambiguous or vague messages tend to be distorted by the receiver in accordance with their own attitudes. Zimbardo (1960) found that there was an assimilation effect when subjects interpreted the meaning of vaguely stated sentences. Subjects who had a positive attitude toward the topic judged the vague sentences as more favorable than those who had a negative attitude. Manis (1961) also found an assimilation effect when subjects were asked to respond to neutral messages.

In a more recent study which specifically addresses equivocation as a rhetorical strategy, Goss and Williams (1973) investigated what effects equivocation has on source credibility. They manipulated messages which clearly agreed with the audience,

clearly disagreed, or messages which disagreed with the audience but were equivocated. As expected, the source of a clearly agree message was perceived as more credible than the source of a clearly disagree message. However, the most important finding of the study was that the source of an equivocated message was perceived as more credible on the character dimension than the source of the clearly disagree message. Even though there was no significant difference for authoritativeness, these findings clearly demonstrate that equivocating on issues which the audience disagrees with can positively effect a speaker's credibility in terms of character ratings. These findings suggest that the use of equivocation under certain circumstances might be a useful rhetorical strategy.

To summarize, equivocated messages appear to evoke more meanings than do clear messages, there is an assimilation effect between attitude position and favorableness toward vague messages, and the source of an equivocated message is perceived as more credible on the character dimension than the source of a message which clearly disagrees with the listeners.

Research Investigating Negations

Philosophers, linguists, and experimental psychologists have all found evidence indicating that negative statements are psychologically more complicated than affirmative statements because they require all the cognitive processes normally involved in understanding affirmative statements plus some further processes of denial (Russell, 1948; Hovland and Weiss,

1953; Wason, 1959, 1962, 1965; McMahon, 1963). The work of Wason has been especially enlightening. In his studies comparing negative sentences and affirmative sentences, results substantiate the common sense assumption that negative sentences take longer to comprehend and cause more mistakes in recall. Wason explains that negations are more difficult to understand because when a negation is presented, the listener must:

1. Transform the negation to an affirmative sentence (a syntactic change)
2. Evaluate the affirmative form
3. Then reverse the evaluation (a semantic change)
4. And ultimately produce a response.

In affirmative sentences the transformation step and reversing the evaluation step are omitted. Since a negative statement demands more steps and involves a semantic rearrangement, negations require more time before they are comprehended and increase the probability of errors in recalling the negation.

Hypotheses

The relatively small body of research investigating equivocation has produced some meaningful results, but many additional variables in the communication setting need to be isolated and understood more clearly before we can accurately predict the effects of equivocation. One of these variables is the perception of equivocation. Do listeners actually perceive an equivocated message as being vague? If they do, then it would appear that the speaker's chances of success would tend to diminish. Goss (1971) addresses this issue specifically when he observes:

> Equivocation implies connotative agreement and referential disagreement. We both will agree a thing is good, but what precisely the thing is, we may disagree on, and never know that we disagree. Connotatively we agree, denotatively we think we understand but don't realize that we may not. The success of a speaker's equivocation depends on the ease with which the respondents can attach a meaning, and on the respondents' failure to notice the vagueness of the message. The respondent should never question the clarity of the message (p. 15).

What, then, is the relationship between the perception of vagueness and the content of a message? Do listeners generally perceive statements as being specific or are there occasions when messages are seen to be vague? Operating on the assumption that there is an assimilation effect between attitude direction and perception of vagueness, the following hypothesis is offered:

> Hypothesis 1: Listeners who have a negative attitude toward the issues presented in a message will perceive the message as being more vague than listeners who have a positive attitude toward the issues.

Students of persuasion have traditionally had an interest in order effects as a communication variable. When two sides of an issue are presented successively by different communicators, does the side presented first or the side presented last have the persuasive advantage? A large body of research has focused on the primacy-recency issue and sought to uncover a conclusive answer to this question (Lund, 1925; Asch, 1946; Cromwell, 1950; Hovland and Mandell, 1957; Luchins, 1957; Miller and Campbell, 1959; Insko, 1964; Luchins and Luchins, 1970). This research indicates that there is no single or absolute answer. Even though the primacy effect was initially thought to hold the greatest advantage, other research indicates

that many variables in the communication event appear to influence persuasion more than the order of presentation. Under some conditions the primacy effect prevails and under other conditions the recency effect is more persuasive.

According to McGuire (1969), the primacy-recency research has operated from two major theoretical foundations: (1) learning theory and (2) perception theory. Of these two competing theories, the latter has in recent years received the greater attention in order effects research, especially from those investigating impression formation (Mayo and Crockett, 1964; Anderson, 1965; McGinnis and Oziel, 1970). According to the perception theory of order effects, the primacy message holds the greatest influence. The initial familiarization with a new situation establishes a frame of reference or perceptual set toward which all subsequent messages are assimilated and interpreted. The mental set created by the first message tends to distort the meaning of later material.

For equivocation to be effective, the receiver must think he agrees with the speaker. If the speaker could initially establish a favorable mental set by advocating issues the receivers agree on, it would appear that the equivocated message which followed would be interpreted in keeping with the initial preset. To test what effects the order of presentation has on equivocation, the following hypotheses are offered:

> Hypothesis 2: A message organized so that clearly agree issues are presented first and equivocated issues are presented last will produce more attitude agreement than a message presenting equivocated issues first and clearly agree issues last.

Hypothesis 3: A message organized so that clearly agree issues are presented first and equivocated issues are presented last will produce more credibility for the source than a message presenting equivocated issues first and clearly agree issues last.

Most studies investigating the effects of negative statements have focused on the amount of time for comprehension and errors in recall as dependent variables; however, little attention has been directed toward determining what effects negations have on attitude agreement or source credibility. The following hypotheses are designed to clarify what those effects might be:

Hypothesis 4: There will be greater attitude agreement if all the issues in a message are stated positively than if all the issues are stated negatively.

Hypothesis 5: The source of a message will be perceived as more credible if all the issues are stated positively than if all the issues are stated negatively.

Hypothesis 6: There will be greater message recall if all the issues are stated positively than if all the issues are stated negatively.

Method

Subjects. Undergraduate students enrolled in the fundamental speech course at the University of Oklahoma served as subjects in the pretest of attitudes and the actual experimental manipulation. These students represent a general cross-section of university undergraduates.

Pretest of attitudes. A pretest of 5 contemporary topics revealed that "Liberal education" was a salient concern for most students and contained issues which were controversial. To answer the question "What should be included in a college

liberal education program?" another pretest was given to another sample of students. Students were asked to respond to 13 issues and indicate on a 7-point semantic differential type scale the degree to which they felt that item should be included in a college liberal education. The 13 items under consideration were:

1. Foreign language cources
2. Electives
3. Social sciences courses
4. A to F grading
5. Instruction by lecture
6. Fine arts courses
7. Technical job training courses
8. Math courses
9. Instruction by discussion
10. Physical sciences courses
11. Pass-fail grading
12. Required courses
13. Ethnic studies courses

Each item was accompanied by a short phrase in parentheses which identified the item in more detail (i.e. "Foreign language courses" (French, Spanish, German); "Pass-fail grading" (A final grade of "pass" or "fail" is given at the end of the semester)). On the basis of this pretest, 4 items (2 agree and 2 disagree) were selected. The 2 agree issues were "Social sciences courses" and "Instruction by discussion," and the 2 disagree issues were "Required courses" and "A to F grading." The criteria for selection were a high or low mean score plus a relatively low variance. In other words, these 4 items were issues which the students rather strongly agreed or disagreed with, and the students were homogeneous in their agreement or disagreement.

Design. Hypothesis 1 was tested using a t-test; however, all other hypotheses were tested using a 2 by 2 factorial design.

To test for a primacy-recency effect, the first factor manipulated the order of presentation of clearly stated issues which students agreed with and equivocated issues which students disagreed with. The agree issues were clearly and precisely stated, but the disagree issues were equivocated using terms from a dictionary of vague words and phrases created by Hiller (1968). The second factor manipulated the positive or negative wording of the issues. In the positive condition all the issues were positively stated, but in the negative condition all the issues were negatively stated. (See Appendix A for a layout of the design.) Results were considered significant at the .05 level of confidence.

Procedure. A total of 60 subjects were used in the experimental manipulation. In the course of the experiment, subjects received 2 booklets. The first booklet contained:

1. An introduction which informed the subjects of a survey being taken on college liberal education.
2. One of the 4 messages, which was attributed to a group of fundamental speech students indicating what they thought should or should not be included in a liberal college education.

These booklets were randomly assigned, and subjects were allowed 1½ minutes to read the message. After reading the message, all booklets were collected from the subjects. The second booklet was then passed out. It contained:

1. A 7-point semantic differential type scale to check the subjects' agreement with the message.
2. McCroskey's source credibility scales for peer evaluation, which contain dimensions for competence, character, and extroversion (McCroskey et al., 1973).
3. A 7-point semantic differential type scale to measure the perceived vagueness of the message.
4. Four multiple choice questions designed to measure the recall of specific issues presented in the message.

5. A multiple choice question asking subjects to identify the number of issues they agreed with.

After subjects had been instructed on how to fill out the various scales, each proceeded at his own pace through the booklet without consultation. Completing the second booklet took about 10 minutes.

Results

In this section the results of each of the 6 hypotheses are considered separately. See Appendix A for the tabled results.

Hypothesis 1: Listeners who have a negative attitude toward the issues presented in a message will perceive the message as being more vague than listeners who have a positive attitude toward the issues.

Agreement with the message was measured using 2 different scales. The first agreement measure was a 7-point semantic differential type scale which asked subjects to indicate on a continuum between "totally agree" to "totally disagree" how they felt about the message. Using this agreement measure as the independent variable, a median split was performed, and subjects were dichotomized into high or low agreement categories. Using the measure of perceived vagueness as the dependent measure, a t-test was run to measure differences between the 2 agreement groups. The results revealed a significant difference, indicating that subjects who disagreed with the message perceived it as being more vague than subjects who agreed with the message ($t = 4.664$, $p < .001$, $df = 58$).

The second agreement measure was a multiple choice question which asked subjects to identify the number of issues (from 0 to 4) they agreed with. Again, a median split was performed on

this agreement measure, and using perceived vagueness as the dependent variable, a t-test was used to test for differences between the two groups. A significant difference was found, indicating that subjects who disagreed with most or all of the issues presented in the message perceived the message as being more vague than subjects who agreed with most or all of the issues presented in the message ($t = 5.149$, $p < .001$, $df = 58$). Based on these 2 significant findings, Hypothesis 1 was confirmed.

> Hypothesis 2: A message organized so that clearly agree issues are presented first and equivocated issues are presented last will produce more attitude agreement than a message presenting equivocated issues first and clearly agree issues last.

This hypothesis tested the effect which the order of clearly stated issues and equivocated issues had on attitude agreement. Again, as in testing the first hypothesis, 2 measures of attitude were used; however, in this hypothesis and all the remaining hypotheses, a 2 by 2 factorial design was used for testing. When the 7-point semantic differential type scale was used as the dependent variable, the main effect was not significant ($F = 0.157$, $df = 1,56$; Table 1). Likewise, when the agreement measure asking subjects to indicate the number of issues they agreed with was used as the dependent variable, the main effect was not significant ($F = 1.692$, $df = 1,56$; Table 2). Since both agreement measures failed to produce significance, Hypothesis 2 was not confirmed.

> Hypothesis 3: A message organized so that clearly agree issues are presented first and equivocated issues are presented last will produce more credibility for the source than a message presenting equivocated issues first and clearly agree issues last.

This hypothesis tested the effect which the order of presentation of agree issues and equivocated issues had on source credibility. The three dimensions of source credibility which served as dependent variables were competence, character, and extroversion. Each dimension was analyzed separately. The competence dimension did not produce a significant main effect ($F= 2.228$, $df= 1,56$; Table 3). In like manner, no significant main effects were found for character ($F= 0.676$, $df= 1,56$; Table 4) or extroversion ($F= 0.520$, $df= 1,56$; Table 5). Therefore, Hypothesis 3 was not confirmed.

> Hypothesis 4: There will be greater attitude agreement if all the issues in a message are stated positively than if all the issues are stated negatively.

In an effort to determine the effect of all issues being stated positively as opposed to all issues being stated negatively, the 2 agreement measures were again used to test this hypothesis. Using the 7-point semantic differential type scale as the dependent variable, the main effect was not significant ($F= 1.819$, $df= 1,56$; Table 1). However, when the agreement measure asking subjects to indicate the number of issues they agreed with was used as the dependent variable, the main effect was significant ($F= 8.109$, $p< .01$, $df= 1,56$; Table 2). On the basis of this significant finding, Hypothesis 4 was partially confirmed.

> Hypothesis 5: The source of a message will be perceived as more credible if all the issues are stated positively than if all the issues are stated negatively.

Using competence, character, and extroversion as the dimensions of source credibility, separate analyses were run

using all positively stated issues and all negatively stated issues as the independent variable. No significant main effects were found for competence ($F= 1.364$, $df= 1,56$; Table 3) or character ($F= 0.676$, $df= 1,56$; Table 4); however a significant main effect was found for extroversion ($F= 7.001$, $p < .025$, $df= 1,56$; Table 5). Therefore, Hypothesis 5 was partially confirmed.

Hypothesis 6: There will be greater message recall if all the issues are stated positively than if all the issues are stated negatively.

In measuring the subjects' responses, the last series of questions were designed to see how well subjects could recall the 4 issues presented in the treatment message. Four multiple choice questions containing 4 choices each were given to the subjects. Only one answer per multiple choice question was correct. On the basis of their ability to recall the 4 issues read earlier, a recall index ranging from 0 (for no issues recalled correctly) to 4 (for all issues recalled correctly) was created for each subject. Using this measure as the dependent variable, when all the issues were stated positively, a significantly greater number of issues were correctly recalled than when all the issues were stated negatively ($F= 6.755$, $p < .025$, $df= 1,56$; Table 6). Therefore, Hypothesis 6 was confirmed.

Discussion

The successful use of equivocation seems to be greatly dependent on the audience's failure to perceive vagueness; yet

it is improbable that a speaker's message is always seen as being clear-cut and specific. The first hypothesis specifically addresses the question of how the audience perceives certain messages. The two groups used in testing Hypothesis 1 were blocked on the basis of agreement with the message, not on the basis of which treatment they received. Confirmation of this hypothesis indicates that the attitude of the listener toward the message is definitely related to perceiving the message as vague or specific. Because of the nature of the design used to test this hypothesis, a causal relationship cannot be drawn; however, this significant finding indicates that such a relationship might exist. Intuitively, the concomitance of negative attitudes and perception of vagueness makes sense. When we encounter messages which agree with our attitudes, there is no reason to be negative. A positive frame of reference is established, and we are more disposed toward saying the message was specifically stated. However, when we disagree with a message, a negative frame of reference is created. Not only do we perceive the message as being incorrect and ill-founded, but also we transfer those negative dispositions to our perception of the message itself, saying it is vague and poorly stated.

To further clarify the question of perceived vagueness, two additional factors were manipulated post hoc. Using a factorial design, the first factor was the order in which vaguely and clearly stated issues were presented, and the second factor was issues all stated positively or issues all

stated negatively. Using perceived vagueness as the dependent variable, a significant main effect was not found for the order in which vaguely stated issues were presented (F= 0.045, df= 1,56; Table 7), and a significant main effect was not found for issues all stated positively or all stated negatively (F= 0.045, df= 1,56; Table 7). These findings seem to indicate that the order in which vague issues are presented and positive or negative wording have a minimal effect on perceived vagueness, while the attitude of the listener toward the message seems to be of greater influence.

The nonsignificant results found in Hypothesis 2 and Hypothesis 3 prevent us from drawing conclusive evidence regarding the effect of the order in which equivocated and clearly stated issues are presented on agreement with a message and perceived source credibility. Observation of the means in the various treatment conditions reveals a slight tendency for more agreement if clearly stated issues are presented first followed by equivocated issues (see Table 8); however, these differences were not significant.

These nonsignificant findings lend support to the feelings of many researchers who believe that we are dealing with a secondary variable when we focus our attention on primacy-recency effects. Perhaps the successful use of equivocation is not a function of the order in which the issues are presented but dependent on a completely different variable. It is observed that the midpoint of the agreement scales are 4 and 2, respectively, and it is clear that the audience did not give

overwhelming agreement to the messages regardless of the order in which the issues were presented. Since the pretest sample revealed high agreement with the issues which were clearly stated (a mean of about 5.5 on the semantic differential type scale), and if we may assume that the subjects used in the experimental manipulation are from the same population, it would appear that the addition of equivocated issues tended to lower the audience's agreement with the message. Such a difference could have been detected if the design used in this study had included a treatment of all clearly stated issues which the audience presumably agreed with; however, since such a control group was not included, we can only assume that the addition of equivocated issues lowered audience agreement. Prior research indicates that there is more agreement with equivocated disagree issues than with clearly stated disagree issues, but the speaker might be expecting too much if he equivocates the same number of issues as he clearly addresses. Perhaps there is a ratio between the number of clearly stated agree issues a speaker can make and the number of equivocated issues his audience will "allow" him to make before they begin to disagree with him. The neutral level of agreement exhibited by the audience in this study might well be due to a violation of such a ratio. Instead of having two agree issues and two disagree issues, possibly a ratio of three agree issues to one equivocated issue might have been more agreeable to the audience. It is conceivable that as the number of agree issues increases, the number of equivocated issues a speaker may use

also increases. Likewise, it is conceivable that if the speaker operates within the boundaries of this equivocation "tolerance level," he will not only receive the agreement of the audience, but also be viewed with high credibility. Obviously, these are issues which further research will have to clarify, and even though there might be a primacy or recency effect of equivocation on agreement and source credibility, the question of a ratio of agree issues to equivocated issues poses an interesting research alternative.

In addition to the investigation of the order in which clearly stated issues and vaguely stated issues are presented, the second concern of this study was to determine the effect of negatively stated issues on agreement, source credibility, and recall. Hypothesis 4 considered the effect of positive or negative wording on agreement, and since the hypothesis was partially confirmed, there is reason to believe that issues which are all stated negatively (that is, saying what should not be done) tend to evoke a sense of negativism in the listener. This conclusion needs to be qualified, however, since a significant difference in agreement for all positively worded or all negatively worded issues was found with only one of the two agreement scales used in this study. Close inspection of the two scales reveals that they are probably measuring different aspects of agreement. The 7-point semantic differential type scale was a more general agreement measure, asking subjects to give an overall response to the issues they had read. Although there was a tendency for the main effect mean of the positively

worded conditions to be higher than the mean of the negatively worded conditions (4.73 to 4.16), the difference was not significant. The second scale was a more specific agreement measure. Here subjects were asked to indicate the number of issues they agreed with (0 to 4). Using this measure as the dependent variable, a significant difference was found between the all positively worded condition and the all negatively worded condition. Perhaps this finding is best explained from a learning theory perspective. Research indicates that subjects which are constantly punished by being told what not to do and never given an indication of what they should do become frustrated and uncertain of themselves. Possibly the same feelings are generated when a speaker prescribes only what should not be done but gives no direction in terms of positive measures which should be taken. As a response to this negativism, the audience is much more disposed toward disagreement.

The results of Hypothesis 5 revealed that the source credibility dimensions of competence and character were not significantly different in the positive-negative wording of issues conditions; however, the source of a message containing all negatively worded issues was perceived as significantly more extroverted than the source of a message containing all positively worded issues. The hypothesis stated that the message source would be perceived as more credible if all the issues were stated positively, but the question is, does perceiving the source of a negatively worded message as being more extroverted mean he is seen as being more credible? Many sources, such

as used car or door-to-door salesmen, are viewed as persons with dynamic and extroverted personalities but are often disliked because of their pushiness and persuasive manner. It is possible that the source of the all negatively worded message is perceived in the same way; that is, he is seen as being more extroverted but he is disliked. Inspection of the agreement mean scores across the all positively stated and all negatively stated issues (see Table 8) reveals that subjects agreed more with the positively worded issues than with the negatively worded issues. This finding would tend to indicate that even though the source of the negatively worded issues is perceived as more extroverted, the audience does not agree with him, probably dislikes him, and in terms of extroversion probably views him with less credibility than the source of the all positively worded message. To clarify this question, a scale measuring "like" or "dislike" of the source of the message should have been included in the study. It is also important to notice that the source credibility scales used in this study were for peers. For public figures or other sources the effects of negatively worded issues might vary greatly in terms of perception of source credibility.

The significant results produced from the testing of Hypothesis 6 are not surprising. The large majority of previous research investigating the effects of negative wording on recall has likewise demonstrated that positively worded messages are easier to recall than negatively worded messages. Wason's (1962) findings (indicating that negations require a transfer

from the negative to the affirmative, evaluation of the affirmative form, and a reversal of the evaluation before the ultimate response), serve as the best explanation of this recall differential. It is important to mention that since subjects receiving the all negatively worded condition could not recall the issues as well as subjects receiving the all positively worded condition, there is a peculiar sort of subject bias operating throughout this entire study. While the extent of this effect cannot be clearly established, and although the effect might be minimal, it should be realized that such a bias was operative in the study.

Summary

This study investigated the effects of the order in which equivocated issues are presented in a message and positive or negative wording on message perception and source credibility. After a review of the literature, six hypotheses were presented for testing. The results may be summarized under four general findings:

1. Perceiving a message as vague is related to the attitude a listener holds toward the issues presented in the message. If the listener has a negative attitude, the message is perceived as vague, but if the listener has a positive attitude, the message is perceived as being stated specifically. The order of equivocated issues and clearly stated issues as well as all positively worded and all negatively worded issues did not significantly effect the perception of vagueness.

2. No significant differences were found between agreement with a message and: (a) the order of equivocated issues and clearly stated issues as well as (b) all issues being stated positively or all issues being stated negatively. The only

deviation from this finding was when all the issues were stated positively, where there was more agreement with specific issues than when all issues were stated negatively.

3. The source of a message in which all the issues are stated negatively is perceived as being more extroverted than when all the issues are stated positively; however, the order of equivocated issues and clearly stated issues did not significantly effect source credibility.

4. There is greater recall of the issues presented in a message if all the issues are stated positively than if all the issues are stated negatively.

The interpretation of these findings indicated that the primacy-recency question with regard to equivocation is probably of secondary importance, but that the ratio of clearly stated issues to equivocated issues is a question which might shed more insight on our knowledge about the effective use of equivocation. In addition, it was concluded that even though a source using all negatively stated issues is perceived as more extroverted, this did not necessarily mean that he is viewed as being more credible than a source using all positively stated issues.

BIBLIOGRAPHY

Anderson, N.H. "Primacy Effects in Personality Impression Formation using a Generalized Order Effect Paradigm," Journal of Personality and Social Psychology, 1965, 2, 1-9.

Asch, S.E. "Forming Impressions of Personality," Journal of Abnormal and Social Psychology, 1946, 41, 258-290.

Cromwell, H. "The Relative Effects of Audience Attitude in the First Versus the Second Argumentative Speech of a Series," Speech Monographs, 1950, 17, 105-122.

Goss, B. "A Conceptual Partitioning of Verbal Ambiguity," A paper read at the Western Speech Association Convention, November, 1971.

Goss, B. and L. Williams. "The Effects of Equivocation on Perceived Source Credibility," Central States Speech Journal, (in press).

Hiller, J. "An Experimental Investigation of the Effects of Conceptual Vagueness on Speech Behavior," An unpublished doctoral dissertation, University of Connecticut, 1968.

Hovland, C.I. and W. Mandell. "Is There a 'Law of Primacy in Persuasion'?" In C.I. Hovland (ed.), The Order of Presentation in Persuasion. New Haven: Yale University Press, 1957.

Hovland, C.I. and W. Weiss. "Transmission of Information Concerning Concepts Through Positive and Negative Instances," Journal of Experimental Psychology, 1953, 45, 175-182.

Insko, C.A. "Primacy Versus Recency in Persuasion as a Function of the Timing of Arguments and Measures," Journal of Abnormal and Social Psychology, 1964, 69, 381-391.

Luchins, A.S. "Primacy-Recency in Impression Formation." In C.I. Hovland (ed.), The Order of Presentation in Persuasion. New Haven: Yale University Press, 1957.

Luchins, A.S. and E.H. Luchins. "Effects of Order of Presentation of Information and Explanatory Models," Journal of Social Psychology, 1970, 80, 63-70.

Lund, F.H. "The Psychology of Belief: IV. The Law of Primacy in Persuasion," Journal of Abnormal and Social Psychology, 1925, 20, 183-191.

Manis, M. "The Interpretation of Opinion Statements as a Function of Message Ambiguity and Recipient Attitudes," Journal of Abnormal and Social Psychology, 1961, 63, 76-81.

Mayo, C.W. and W.H. Crockett. "Cognitive Complexity and Primacy-Recency Effects in Impression Formation," Journal of Personality and Social Psychology, 1964, 68, 335-338.

McCroskey, J., T. Jensen, and C. Valencia. "Measurement of the Credibility of Peers and Spouses," A paper presented at the International Communication Association Convention, Montreal, Quebec, April, 1973.

McGinnis, J.H. and L.J. Oziel. "Note: Primacy Effects in Impression Formation," Perceptual and Motor Skills, 1970, 30, 393-394.

McGuire, W.J. "The Nature of Attitudes and Attitude Change," In G. Lindzey and E. Aronson (eds.) The Handbook of Social Psychology, 2nd edition, Reading, Mass.: Addison Wesley Publishing Company, 1969, vol. III, pp. 136-314.

McMahon, L.E. "Grammatical Analysis as Part of Understanding a Sentence," An unpublished doctoral dissertation, Harvard University, 1963.

Miller, N. and D.T. Campbell. "Recency and Primacy in Persuasion as a Function of the Timing of Speeches and Measurements," Journal of Abnormal and Social Psychology, 1959, 59, 1-9.

Russell, B. Human Knowledge: Its Scope and Limits. London: Allen and Unwin, 1948.

Samovar, L. "Ambiguity and Unequivocation in the Kennedy-Nixon Television Debates," Quarterly Journal of Speech, 1962, 48, 277-279.

Wason, P.C. "The Processing of Positive and Negative Information," Quarterly Journal of Experimental Psychology, 1959, 11, 92-142.

_____. Psychological Aspects of Negation. London: Communication Research Centre, University College, London, 1962.

_____. "The Contexts of Plausible Denial," Journal of Verbal Learning and Verbal Behavior, 1965, 4, 7-11.

Zimbardo, P. "Verbal Ambiguity and Judgmental Distortion," Psychological Reports, 1960, 6, 57-58.

APPENDIX A

FIGURE 1

Layout of Design*

	Clear-Equivocated Order	Equivocated-Clear Order
Positive wording	1. Need to take social sciences courses such as psychology and sociology. 2. Need instruction where teachers employ a class discussion approach to teaching. 3. As a rule should be encouraged to follow a degree program which has been designed by professional educators. 4. On the whole do need to be evaluated by some systematic grading scale.	1. As a rule should be encouraged to follow a degree program which has been designed by professional educators. 2. On the whole do need to be evaluated by some systematic grading scale. 3. Need to take social sciences courses such as psychology and sociology. 4. Need instruction where teachers employ a class discussion approach to teaching.
Negative wording	1. Do not need a degree program where approximately 70% of the courses are required. 2. Do not need to be evaluated on an "A" to "F" grading scale. 3. Ordinarily do not need to take courses concerned with social behavior. 4. On the whole teachers should not employ a student interchange approach to instruction.	1. Ordinarily do not need to take courses concerned with social behavior. 2. On the whole teachers should not employ a student interchange approach to instruction. 3. Do not need a degree program where approximately 70% of the courses are required. 4. Do not need to be evaluated on an "A" to "F" grading scale.

*This layout of the design shows the various treatment conditions and the four issues presented in the messages. All conditions were introduced with the statement, "After considering a variety of topics related to the issue of what should be included in a liberal college education, we have reached several final decisions. We feel that students:" (followed by the four issues for the respective conditions).

TABLE 1

Analysis of Variance for Agreement

Source	SS	df	MS	F	p
Order	0.416	1	0.416	0.157	n.s.
Negations	4.816	1	4.816	1.819	n.s.
O x N	1.351	1	1.351	0.510	n.s.
Error	148.267	56	2.647		
Total	154.850	59			

TABLE 2

Analysis of Variance for Agreement Issues

Source	SS	df	MS	F	p
Order	1.667	1	1.667	1.692	n.s.
Negations	8.067	1	8.067	8.189	<.01
O x N	2.400	1	2.400	2.436	n.s.
Error	55.200	56	0.985		
Total	67.334	59			

TABLE 3

Analysis of Variance for Competence

Source	SS	df	MS	F	p
Order	35.267	1	35.267	2.228	n.s.
Negations	21.600	1	21.600	1.364	n.s.
O x N	0.067	1	0.067	0.004	n.s.
Error	886.400	56	15.828		
Total	943.334	59			

TABLE 4

Analysis of Variance for Character

Source	SS	df	MS	F	p
Order	8.067	1	8.067	0.676	n.s.
Negations	8.067	1	8.067	0.676	n.s.
O x N	17.066	1	17.066	1.431	n.s.
Error	667.734	56	11.923		
Total	700.934	59			

TABLE 5
Analysis of Variance for Extroversion

Source	SS	df	MS	F	p
Order	5.400	1	5.400	0.520	n.s.
Negations	72.600	1	72.600	7.001	<.025
O x N	1.067	1	1.067	0.102	n.s.
Error	580.667	56	10.369		
Total	659.734	59			

TABLE 6

Analysis of Variance for Recall

Source	SS	df	MS	F	p
Order	0.150	1	0.150	0.137	n.s.
Negations	7.350	1	7.350	6.755	<.025
O x N	0.150	1	0.150	0.137	n.s.
Error	60.934	56	1.088		
Total	68.584	59			

TABLE 7
Analysis of Variance for Vagueness

Source	SS	df	MS	F	p
Order	0.150	1	0.150	0.045	n.s.
Negations	0.150	1	0.150	0.045	n.s.
O x N	0.017	1	0.017	0.005	n.s.
Error	185.867	56	3.319		
Total	186.184	59			

TABLE 8

Dependent Variable Means Per Treatment

Dependent Variables	Treatments: Clear-Equiv. Order and All Positive Wording	Equiv.-Clear Order and All Positive Wording	Clear-Equiv. Order and All Negative Wording	Equiv.-Clear Order and All Negative Wording
1. Agreement	4.666	4.800	4.400	3.933
2. Agreement Issues	2.666	2.733	2.333	1.600
3. Competence	12.866	11.266	14.000	12.533
4. Character	14.333	14.666	16.133	14.333
5. Extroversion	13.466	13.800	15.400	16.266
6. Recall	3.666	3.866	3.066	3.066
7. Vagueness	4.733	4.600	4.800	4.733